# MADISON BURRUS

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### **SKILLS**

R Programming • Python • Geographic Information Systems (ArcGIS/QGIS) • Scientific Research • Data Analysis • Data Presentation • Technical Writing • Public Speaking • PowerPoint • Word • Excel

#### RELEVANT EXPERIENCE

RESEARCH ASSISTANT 07/2019 – PRESENT

LAWRENCE BERKELEY LAB, UNIVERSITY OF CALIFORNIA | BERKELEY, CA

- Assist development and standardization of project-wide QA/QC procedures
- Develop scripts in Python to inventory data quality (Quality Assessment) of meteorological and biogeochemical datasets
- Test API tools and data structures and determine suitability of current API version against project needs

#### **GIS TECHNICAL VOLUNTEER**

02/2019—PRESENT

THE NATURE CONSERVANCY | CHESTER, NJ

- Support riverine restoration by prioritizing potential obsolete-dam removal initiatives
- Assist management and development of interactive mapping program for New Jersey
- Review geospatial workflows and test validity of argument results

#### **RESEARCH INTERN & ASSISTANT**

08/2017 - 08/2018

LAWRENCE BERKELEY LAB, UNIVERSITY OF CALIFORNIA | BERKELEY, CA

- Investigated relationships in riverine hydrgeochemistry using  $\Delta Q/C$  relationship models
- Manipulated and visualized field data to analyze relationships using R and MATLAB
- Synthesized complex research topics into two technical research reports
- Delivered two poster presentations of research findings to general and expert audiences

#### **UNDERGRADUATE RESEARCH ASSISTANT**

05/2016 - 12/2016

RUTGERS' PINELAND FIELD STATION | PEMBERTON, NJ

- Collaborated with Rutgers' students on categorization of Mycorrhizae species research
- Planned and assisted field activities of taking soil core samples
- Examined fungal specimen, managed samples and data, and isolated fungi DNA

# **EDUCATION**

STONY BROOK UNIVERSITY | STONY BROOK, NY

**AUGUST 2017** 

**B.S., ENVIRONMENTAL SCIENCE** 

MINOR IN ENVIRONMENTAL ENGINEERING (3.3 GPA)

## **ACTIVITIES**

- Toastmasters; Member Apr 2018—Present
- International WorkAway Volunteer in Japan; Sep—Dec 2018
- GIS Undergraduate Teaching Practitioner; Fall 2016
- Member Committee Leader, Long Island Water Environmental Association; 2016
- Violinist, Strings by the Sea ensemble, San Francisco Civic Symphony & Berkeley Baroque Strings